

Hopkins' Cohen Emphasizes 3 H's of Patient Care

BY RICH MCMANUS

I don't know about you, but if someone is going to do brain surgery on me, I want a surgeon as skilled at making pot jokes, enlivening the history of neurosurgery with anecdotes from Maimonides, Twain and Da Vinci and schooled in Elvis impersonation as Dr. Alan R. Cohen, professor of neurosurgery and Carson-Spiro professor of pediatric neurosurgery and chief of pediatric neurosurgery at Johns Hopkins University School of Medicine.

In his Grand Rounds/Great Teachers lecture "The Art of Neurosurgery" on Nov. 8 in Lipsett Amphitheater, Cohen proved not only deeply immersed in the history of his



Great Teacher lecturer Dr. Alan R. Cohen also exhibited a great sense of humor.

field, but also acutely aware of the hunger patients have, especially those with grievous diagnoses, for treatment that embodies what he called the "three H's—humility, humanity and humor."

Neurosurgery is a relatively new field, having been born early in the last century, and Johns Hopkins was its cradle. That was where Dr. Harvey Cushing, the father of what was once known as "the special field," practiced medicine, giving birth to what today is still a relatively small fraternity.

Cohen specializes in minimally invasive pediatric neurosurgery. In a book he published last year—*The Art of Pediatric Neurosurgery: Tricks of the Trade*—he offered "nuances of how to stay out of trouble, or get out of it once you've gotten into trouble." His talk focused on the non-technical side of his work.

The Latin phrase *Ars longa, vita brevis* (Art is long, life is short) became a theme. "There is so much information we need to accumulate [to practice neurosurgery] that a lifetime is not long enough to do that. And that is true for technical and non-technical aspects of the field."

SEE COHEN, PAGE 6



Checkmate for Eagle Scout. See story on p. 5.

ALSO THIS ISSUE

Briefs	2
Fabricators Move from ORS to ORF	3
Telomere Meeting Draws Experts	5
NCCIH Holds Workshop for Trainees	7
Digest	9
Milestones	10
Volunteers	11
'Relationship Currency' Feeds Success	12

CULTURE & COGNITION

Education Is Key to Reducing Disparities in Alzheimer's

BY DANA TALESNIK



Dr. Jennifer Manly

Everyone typically has a bit of memory decline with age, though it's unclear what exactly causes some people to develop Alzheimer's disease. Recent research has shown that certain racial and ethnic groups have a much higher risk of developing this neurodegenerative disease, but in these cases biology might be only part of the puzzle.

Dr. Jennifer Manly is a neuropsychologist

SEE MANLY, PAGE 4

Gut Hormones Influence Eating, Addictive Behaviors

BY ERIC BOCK

What's in your guts might influence how your brain responds not only to food, but also to alcohol and cigarettes, claimed Dr. Tony Goldstone at an NIH psychoneuroendocrinology scientific interest group lecture in the Clinical Center.

Several gut hormones, including ghrelin, PYY, GLP-1, and insulin influence the brain's response to food, he explained. These hormones send signals to areas of the brain responsible for eating and addictive behaviors.



Dr. Tony Goldstone

SEE GOLDSTONE, PAGE 8

DDM Series Enters 12th Season

The Deputy Director for Management (DDM) Seminar Series is set to offer another round of leadership and management presentations beginning this month.

The 12th annual series will host speakers known for delivering insights into motivation, innovation and workforce dynamics. The seminars provide NIH employees the opportunity to advance their knowledge of best practices in a variety of leadership and management issues.

The first seminar features Travis Mills speaking on "Self-Motivation and Overcoming Adversity" on Dec. 21 from 11 a.m. to 12:30 p.m. in Masur Auditorium, Bldg. 10. The series continues in the new year with three more seminars: Lisa Bodell, "Innovation and Simplification: Times of Change" on Feb. 8; Sheila Heen, "Thanks for the Feedback: The Science and Art of Receiving Feedback Well" on Apr. 5; and Christine Porath, "The Impact of Civility and Incivility on Worker Productivity" on June 14.

Presentations will be available at <http://videocast.nih.gov/> for those who cannot attend or when Masur Auditorium reaches capacity.

Sign language interpreters will be provided. Individuals who need reasonable accommodation to participate should call (301) 496-6211 4 work days before the event.

For more information about the series and to view previous videocasts, visit <http://www.ddmseries.od.nih.gov/>.

Webinar Discusses Web Site on Research Methods, Dec. 13

Dr. David M. Murray, NIH associate director for prevention and director of the Office of Disease Prevention, will present the webinar "Research Methods Resources: A New Website from the NIH Office of Disease Prevention" on Wednesday, Dec. 13 from 11 a.m. to noon.

The webinar, sponsored by the NIH Office of Disease Prevention, will provide a guided tour of the new Research Methods Resources web site and discuss its relevance to changes in NIH requirements for applications for clinical trials submitted on or after Jan. 25, 2018. The webinar will include examples to illustrate the use of the sample size calculator for group- or cluster-randomized trials, which is included on the web site.

Register for the event at <https://nih.webex.com/nih/onstage/g.php?MTID=e47b0a107b0f65b7efb6039359c24be57>.

Murray will accept questions during his webinar via WebEx and on Twitter with #NIHMtG.

Property Management Portal Opens

The NIH Property Management Portal was recently approved for implementation across all institutes and centers during FY 2018.



CDC Director Fitzgerald Visits NIH

Dr. Brenda Fitzgerald (right, c), director of the Centers for Disease Control and Prevention, visited NIH on Nov. 2, getting an overview of NIAID from its director Dr. Anthony Fauci (l) and meeting with NIH director Dr. Francis Collins (r). She also visited the Vaccine Research Center for updates on NIH vaccine efforts with Dr. Barney Graham (above, l), co-deputy director of the VRC. During her morning at NIH, Fitzgerald also met with NIMH director Dr. Josh Gordon and with Dr. Jim Anderson, director of NIH's Division of Program Coordination, Planning and Strategic Initiatives. Fitzgerald was named 17th director of CDC in July and previously served as commissioner of the Georgia department of public health from 2011 to 2017.

PHOTOS: CHIA-CHI CHARLIE CHANG



It is a web-based application that facilitates open communication between the IC community and its property professionals (property accountability officers and property custodial officers). The portal allows direct access to personal property records, promoting increased awareness and accountability for government property.

The NIH Property Management Branch is managing a working group for this project as well as hosting information sessions via WebEx. Sessions are open to the NIH community on Dec. 6, 13, 20 and 27. Sign up for sessions at <https://doodle.com/poll/2ywawyepzhma6wis>.

For more information, contact Emily Ballou, (301) 594-5569, emily.ballou@nih.gov or Michael Fratina, (301) 451-9605, michael.fratina@nih.gov.

Become a Leave Bank Member Today

Open enrollment for the 2018 NIH Leave Bank is under way and ends Dec. 11. Protecting your income while helping others has never been this easy, so don't miss this final opportunity. Enrollment in the Leave Bank is open to all NIH federal employees. The membership period will begin on Jan. 7, 2018.

The Leave Bank is a pooled bank of donated annual and restored leave available to eligible members. The program acts like an insurance policy for your paycheck and amounts to paid leave for members who have exhausted all of their own sick and annual leave and are affected by a personal or family medical condition.

To become a 2018 member, access ITAS and enroll under "Leave Bank Membership." If you are currently a 2017 Leave Bank member, your membership will automatically continue into 2018, unless you opt-out. For each membership year, there is a membership contribution requirement. The annual membership contribution is 1 pay period's worth of annual leave accrual (4, 6 or 8 hours) per year. If you don't have the needed accrued leave, you can still join; the membership contribution will automatically be waived.

For an informational video on how to enroll, visit <https://hr.nih.gov/benefits/leave/leave-bank/becoming-member>. Questions may be directed to (301) 443-8393 or LeaveBank@od.nih.gov. 

Fabricators Move from ORS to ORF

BY ERIC BOCK

Where do NIH scientists go when they need custom instrumentation, equipment design, fabrication and modification services? For the past 35 years, the Mechanical Instrumentation Design and Fabrication Branch in the Office of Research Services' Division of Scientific Equipment and Instrumentation Services (DSEIS) has provided these services to campus researchers.

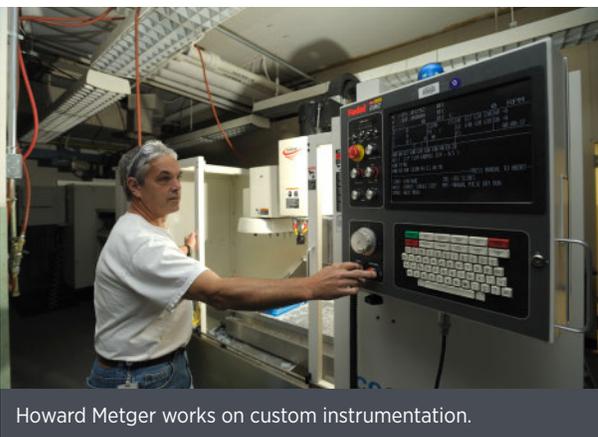
On Oct. 1, the design and fabrication services moved from ORS to the Office of Research Facilities. DSEIS will continue to provide equipment sales, rental, maintenance and repair services.

"It was an extremely tough decision to close down this important resource, but due to the budgetary circumstances, it had to be made," said Tim Tosten, acting ORS director. "Fortunately, Dan Wheeland, ORF director, stepped up and found a way to make it work to assist both our aging NIH infrastructure and our scientists."

Tammie Edwards, DSEIS acting director, called the move a "win-win for everybody involved." It allows former design and fabrication staff to continue doing what they love, lets investigators continue to use the service, brings their unique expertise to ORF, helps maintain older campus buildings and finds a new home for a valued operation.

Edwards noted that the branch was fee-for-service, meaning it must recover costs through a charge-back system. Although efforts were made to improve efficiencies and increase outreach efforts, new technologies such as 3-D printing and insufficient workload made it difficult to achieve solvency.

The advances, however, haven't made the staff's expertise obsolete. They are "experts at their craft," said former supervisor Jerry Tyus. Everything they make is a one-of-a-kind piece to help scientists conduct experiments and contribute to innovative research. In a 2012 video about the service,



Howard Metger works on custom instrumentation.

NEI scientific director and senior investigator Dr. Sheldon Miller said, "This group is extremely professional and the work that they do is excellent."

One of the employees, Howard Metger, has worked there since 2004. Before that, he was with the Department of Defense and the National Institute of Standards and Technology. At NIST, he and his coworker Robert Clary helped design and build

• • •

"In 10 minutes, we saved NIH \$20,000 with our little bit of knowledge. To a single researcher, that's a lot of money."

-HOWARD METGER

• • •

the display cases for the Declaration of Independence, the Constitution and the Bill of Rights at the National Archives in Washington, D.C.

These days, Metger helps researchers, scientists and surgeons design or modify metal and plastic devices. Often, customers come in and describe a problem to him and he finds a solution. Recently, the branch built devices that house animals, separate blood and support a knee.

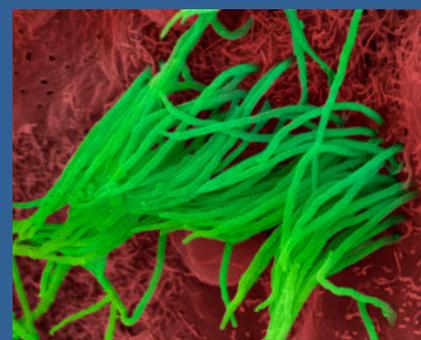
Metger doesn't use 3-D printing because the resolution on the printers isn't always high enough. For example, he built a blood separator that required a piece .012 of an inch wide—the width of 3 strands of hair.

"3-D printing is great for some things, but doesn't help with the very small projects," he said.

The branch regularly saves researchers money. In one instance, a scientist needed a replacement screw for a microscope. She came to Metger after she learned the device's manufacturer didn't have any replacements. The researcher would've had to buy another microscope. Metger looked at the screw and started working.

"In 10 minutes, we saved NIH \$20,000 with our little bit of knowledge," he explained. "To a single researcher, that's a lot of money."

NIH'ers can now procure fabrication services for themselves by completing a maintenance service request online or by phone. For more information, visit <https://www.orf.od.nih.gov/PropertyManagement/MaintenanceServiceRequests/Pages/default.aspx>. **R**



ON THE COVER: *Cilia in the zebrafish ventricle*

IMAGE: HUIQING LI, NHLBI & PATRICIA ZERFAS, OD/ORS; COLORIZATION: ALAN HOOFRING, ORS/MAB

The NIH Record

Since 1949, the *NIH Record* has been published biweekly by the Editorial Operations Branch, Office of Communications and Public Liaison, National Institutes of Health, Department of Health and Human Services. For editorial policies, email editor or phone (301) 496-2125.

Editor: Rich McManus
Rich.McManus@nih.gov

Associate Editor: Carla Garnett
Carla.Garnett@nih.gov

Staff Writers:
Eric Bock • Eric.Bock@nih.gov
Dana Talesnik • Dana.Talesnik@nih.gov

Subscribe via email: listserv@list.nih.gov Follow: <http://nihrecord.nih.gov/>



The *NIH Record*
is recyclable as
mixed paper.

NIH National Institutes of Health
Turning Discovery Into Health

who has been studying the racial disparities of Alzheimer's patients for more than 25 years near Columbia University Medical School. Her focus area is Washington Heights, a diverse neighborhood in northern Manhattan that's home to many African Americans who were born and raised in the south—a geographic feature that's integral to her study—and Caribbean Hispanic immigrants.

"It's an incredible place to do research on aging and ask questions about how culture affects the cognitive aging process," said Manly at the Oct. 18 lecture, organized by the National Institute on Aging.

As lead investigator on the WHICAP [Washington Heights-Inwood Columbia Aging Project] study, Manly and her colleagues have evaluated more than 6,500 seniors in their homes, conducting a cognitive test battery and extensive medical and functional interviews, then following up with them every 18-24 months. Based on cohort studies that began in 1992, WHICAP



Manly calls for imaging earlier in life.

PHOTOS: ANDREW PROPP

about Alzheimer's...based on people who were largely recruited through clinics," said Manly. "One of the reasons there's a bias in these types of studies is that there's continuing mistrust of research and also stigma associated with cognitive impairment and dementia in some of the communities we're hoping to engage and involve."

★ ★ ★

"African Americans, Hispanics and American Indians continue to experience everyday lack of cultural and linguistic competency in the health care system, so it's not something in the past. The source of mistrust of research is here and now."

-DR. JENNIFER MANLY

★ ★ ★

data revealed that African Americans and Caribbean Hispanics have a significantly higher risk for Alzheimer's disease and a more rapid cognitive decline over time than do whites. Other studies have corroborated this finding.

Although they're at higher risk, racial and ethnic minorities tend to be underdiagnosed and undertreated, including many of those living in Washington Heights. Wary of the health care system, African Americans and Latinos are less likely to come to memory disorder clinics, which can skew Alzheimer's study data. To help prevent this selection bias, WHICAP chose to conduct research in patients' homes.

"There's a danger in making conclusions

For minority communities, past medical abuses still loom large. Even if ethical and legal standards now exist to help prevent mistreatment, said Manly, "African Americans, Hispanics and American Indians continue to experience everyday lack of cultural and linguistic competency in the health care system, so it's not something in the past. The source of mistrust of research is here and now."

When minorities do visit clinics, said Manly, they tend to be in later stages of dementia, which becomes more costly to treat and a greater burden on caregivers. The challenge is finding ways to engage at-risk patients much earlier.

"When we start brain imaging at age 70,

it's too late," said Manly. "We need imaging earlier in life to uncover what some of the causes and influences are on development of neuropathology in the brain."

Interestingly, in African Americans, the presence of more white matter hyperintensities in the brain have been linked to cognitive decline, whereas for whites, below average hippocampal volume was tied to dementia. This suggests there may be different pathways to Alzheimer's disease, said Manly.

In addition to biological or genetic factors, Manly's research indicates that racial disparities in Alzheimer's can be attributed to socio-economic and cultural factors.

"African ancestry and racial/ethnic self-identification are markers for individual social experiences, as well as those of your parents and grandparents, such as discrimination, segregation and socio-economic status."

Manly argues that educational experience, particularly the quality of schooling and literacy, has a powerful influence on later-life cognitive decline. In historical data from 1919 to 1951, African-American students in the south not only had much larger class sizes (student/teacher ratio), but also their schools were only open half as often as schools for whites in the same state or in northern schools.

"In these analyses, the disparities in developing Alzheimer's disease across race are accounted for by indicators of school quality," said Manly. "I think that educational experience, not just years of school, is a pathway through which disparities in dementia emerge."

While further study is needed, Manly noted a declining trend of dementia among African Americans that corresponded to compulsory school law changes and higher reading levels.

One of her newer studies is tracking down some of the 400,000 high school participants from the 1960 Project Talent study, who would now be in their 70s, to help gauge the effect of school quality on racial disparities in Alzheimer's disease.

More representative studies are needed, she said, that incorporate cognitive testing, imaging of neuropathology and measures of educational experience. Coupled with interventions earlier in life, such research can help prevent the Alzheimer's epidemic from having a disproportionate effect on people of color. **R**



Executive Child Development Center gets new chess/checkerboard activity. Boy Scout Troop 461 Bethesda, led by Caleb Bowers, former ECDC student, built the game for children at the center.

High School Student Gives Back

Who says, “You can’t go home again?” Not Caleb Bowers. A local high school student, Bowers attended the NIH Executive Child Development Center from infancy through elementary school. He recently returned to the center to build a large outdoor chess/checkerboard in the school-age play area.

Bowers organized 26 Boy Scouts from Troop 461 in Bethesda and supporting adults in the completion of his Eagle Scout project. He planned, sought approval from three agencies, purchased materials and constructed the platform and board.

Anne Schmitz, director of the Executive Child Development Center, said, “It’s what the Boy Scouts do best. Many of the troop members attended our center and wanted to contribute to the children’s experience. I am very thankful.”

“I really like the fact that I have left a part of me behind with the center,” said Bowers. “I went there until I was 11, and when I joined the Boy Scouts, I knew that I wanted to do my Eagle project there. The center has been a really big part of my life, so it feels really good to give back to them. I have so many fond memories and I wanted to do something for them to show my appreciation for all the good times I had.”

His parents, Dr. John Bowers and Karen Bowers, both work for the Center for Scientific Review.

Telomere Meeting Draws Experts from Across Disciplines

BY VIRGINIA GUIDRY

Can telomeres serve as valuable markers of exposure to pollutants or stress, or of vulnerability to disease? An interdisciplinary group of experts gathered at NIEHS recently to discuss these and other questions about telomeres, which are caps on the ends of chromosomes that shorten each time a cell divides. Telomeres decrease in length as people age.

The workshop, “Telomeres as Sentinels for Environmental Exposures, Psychosocial Stress and Disease Susceptibility,” was organized by Dr. Michelle Heacock of NIEHS’s Hazardous Substance Research Branch and Dr. Lisbeth Nielsen of NIA’s Division of Behavioral and Social Research.

“We are here to generate a strong vision for the rapidly developing field of telomere research,” said NIEHS and National Toxicology Program director Dr. Linda Birnbaum, in opening remarks. “There are many questions in the field and we need to advance collaboratively—basic scientists together with clinicians and epidemiologists.”



NIEHS’s Dr. Michelle Heacock (l) and NIA’s Dr. Lisbeth Nielsen

PHOTOS: STEVE MCCAWE

Basic scientists are uncovering the details of telomere biology in the laboratory, while clinicians and epidemiologists explore telomere length as a marker of human health. Studies suggest that excessively shortened telomeres may be associated with an increased risk of cardiovascular disease and some degenerative diseases. Extra-long telomeres may be associated with an increased risk of certain cancers. However, these conclusions are far from settled.

Participants quickly zeroed in on the question of precise and reliable measurements of telomere length. Some scientists are concerned that differences among study results may represent variations in measurement. Common measurement techniques include quantitative polymerase chain reaction (qPCR) and a combination of flow cytometry and fluorescent *in situ* hybridization (Flow-FISH). Although some scientists criticized the potential for error in measurement of telomere length using qPCR, others said it was not credible that measurement error alone would produce the effects on telomere length observed using the method. Dr. Stacy Drury of Tulane University suggested the need to balance use of qPCR and Flow-FISH and to closely monitor the reproducibility of measurements.

One point of consensus was that telomere length during childhood is one of the most important determinants of telomere length in adults. This means that some data on telomere length in adults will reflect patterns set in early life, unless researchers have the information to control for childhood length, suggested Dr. Elissa Epel of the University of California, San Francisco.

Dr. Pathik Wadhwa of the University of California, Irvine, said a person’s telomere length may initially be set in the womb. “There is preliminary evidence that maternal stress and nutrition-related factors during pregnancy may influence telomere length,” he said. Other scientists suggested that childhood exposure to stress or environmental factors such as ionizing radiation may have a greater effect on telomere length than similar exposures during adulthood, underscoring the need to understand the biology of telomere length at different life stages.

Other evidence suggests telomere length may be partly inherited. Dr. Abraham Aviv of Rutgers University emphasized that unless scientists account for heritability, it can be hard to analyze the influence of environmental factors on telomere length.

The question of whether telomere length can serve as a marker of exposure to environmental pollutants and stress remains unsettled. Some scientists proposed that telomeres may indicate vulnerability to environmentally induced disease. Others, who supported the potential for telomere length to be a marker, acknowledged that challenges with measurement need to be resolved.

Dr. Colter Mitchell of the University of Michigan reflected that developing a new biomarker always involves a lengthy scientific process. He suggested that it starts with initial excitement about the method, which becomes disillusionment as challenges are realized and then solid methods emerge.

SIZE MATTERS



Cohen, at the lectern and in the slide, has been known to relish Elvis impersonations as a way of strengthening the doctor-patient bond.

PHOTOS: MARLEEN VAN DEN NESTE

Cohen

CONTINUED FROM PAGE 1

Cohen acknowledges that “technology has revolutionized what we can do, but it comes with a price.” The modern physician is often in such a hurry that simply listening to the patient is becoming a lost art.

Cultivating an appropriate bedside manner “is little discussed in medical school, but it is at least as important as the technical aspects.”

Physicians are also saddled with online paperwork in the form of the electronic health record, “which is not taken terribly seriously by most of us—it’s an automated billing generator, really... If we spent as much time with the patient as we did on coding, we’d do a better job.”

The so-called EHR, which Cohen labels DOD, or degradation of documentation, is a symptom of a kind of mechanization in medicine that harms the profession’s foundation—the laying on of hands—which is being eroded in an era of technology.

Notable Quotes for the Physician

Guest lecturers at Clinical Center Grounds Rounds/Great Teachers realize that to become a great teacher, one must first become a great student. And great students are adept at citing the masters in their field.

Here are some of the authorities cited by Dr. Alan R. Cohen during his Nov. 8 presentation.

On the importance of the patient-physician relationship: “Treat people as if they were what they ought to be and you will help them become what they are capable of being.”—Johann Wolfgang von Goethe

On the need to provide hope: “Everything can be taken from a man but one thing: the last of the human freedoms—to choose one’s attitude in any

“Patients are now considered ‘clients,’ and doctors are now ‘health care professionals,’” he lamented. “I don’t think the ‘laying on of hands’ refers to the computer keyboard... We forget that what is remembered most by our patients is often the simplest things we do.”

Cohen admitted, “Humility is not a word found in the lexicon of most of us in neurosurgery.” That virtue was evident in his dad, who finished first in his medical school class yet never told his wife. “Unfortunately, the humility gene did not appear to get transmitted down to me,” Cohen quipped.

Describing himself as “a yokel from Poughkeepsie,” Cohen got into Harvard College but soon found himself “in over his head.” While a letter of scholarship from Harvard became a source of family and community pride, Cohen was brought to Earth by the amount—\$13.50.

“That taught me an important lesson in humility at an early age,” he said. Crucially, for physicians, “Patients know it when it’s not there,” warned Cohen.

given set of circumstances, to choose one’s own way.”—Viktor E. Frankl

On balancing hope with honesty: “I have too much respect for the truth to drag it out on every trifling occasion.”—Mark Twain

On humility: “True humility is not thinking less of yourself; it is thinking of yourself less.”—C.S. Lewis

On communicating clearly: “Simplicity is the ultimate sophistication.”—Leonardo da Vinci

On humane care: “May I never forget that the patient is a fellow creature in pain. May I never consider him merely a vessel of disease.”—Maimonides

“Humanity,” he continued, “is another non-technical pearl of what it means to be a doctor, a healer. But we’ve forgotten a lot about the personal connection to our patients.” Central to humanity is the concept of equanimity. “[Sir William] Osler [in his essay *Aequanimitas*] said it was a physician’s most important trait.”

Cohen said that the balance between being honest with patients while still offering hope is “a subtle but important factor in the art of healing.” He quoted Dr. Edward L. Trudeau, a beloved physician whose statue at Saranac Lake, N.Y., where he founded his sanatorium, bears his motto: “To cure sometimes, to relieve often, to comfort always.”

Offering his own “Monarch notes” summarizing his 10 Commandments of good physicianship, Cohen said, “Listen, empathize and offer hope...before you talk, hear.

“Caring means being troubled by someone else’s trouble,” Cohen said, quoting bioethicist Dr. Albert Jonsen. “A lot of important things are gray zones in the doctor-patient relationship...but we always have to offer something to hold onto.”

Or as Rudyard Kipling once said, “Words are...the most powerful drug used by mankind.”

The final H, humor, was where Cohen earned his scholarship with the crowd. He played an SNL-worthy video clip of himself as a self-involved surgeon utterly botching an interaction with parents, played by actors, of a child with cancer.

Quoting Voltaire, he said, “The art of medicine consists of amusing the patient while nature cures the disease.” The twin pink Elvis lamps adorning Cohen’s office desk attest to his belief that “humor enables you to strengthen the doctor-patient bond... it is a powerful adjunct to healing.

“It’s important to realize what it’s like on the other side of the bed rail,” he said. “The three H’s make you a better healer and a better doctor...Patients have taught me more about the art of neurosurgery than I would ever learn in books.”

Cohen concluded with an admission that “the work is hard, but the rewards are rich... don’t forget to enjoy the ride.”

The complete lecture is available at <https://videocast.nih.gov/summary.asp?Live=26616&bhcp=1>. 



Workshop participants gather with NCCIH acting director Dr. David Shurtleff (front, c) and staff.

NCCIH Workshop Helps Trainees Build Research Careers

BY ANITA MCRAE-WILLIAMS

A diverse group of pre- and postdoctoral NCCIH research fellows and trainees gathered in Natcher Bldg. Oct. 16–17 for a career development workshop, NCCIH Fellows and Trainees: Building a Successful Research Career Path. The workshop focused on preparing them for the next stage of their careers in complementary and integrative health research.

“As outlined in our strategic plan, we want to push the NCCIH research agenda forward by training the next generation of scientists and teaching them how to successfully navigate the complex NIH system,” said acting NCCIH director Dr. David Shurtleff.

What made this workshop unique is that both mentors and trainees supported on F awards and T programs were invited to attend. This dynamic demonstrated strong investment and hands-on involvement from NCCIH and mentors.

The workshop’s goals were to help students connect NIH funding opportunities across stages of their career development, understand how to interact with staff to develop proposals, navigate the review process successfully, develop resilience to overcome career roadblocks and develop a plan for a successful research career.

Dr. Emmeline Edwards, director of NCCIH’s Division of Extramural Research, highlighted NIH’s Next Generation Researchers Initiative and NCCIH’s commitment to promote earlier independence and increased funding for new investigators.

Dr. Kay Lund, director of the NIH Division of Biomedical Research Workforce, shared her career progression from academia, including her experiences in graduate school and postdoctoral training, to appointments at Massachusetts General Hospital, Harvard Medical School and the University of North Carolina prior to joining NIH. She discussed the division’s responsibilities for policy and extramural programs related to training, career development and diversity in the biomedical research workforce.

Lund also highlighted the division’s research and economic analyses focused on prediction of workforce trends and future needs for growth and diversity of the biomedical research workforce at all levels.

The workshop offered a range of opportunities for participants, including sessions on NIH funding, career timeline planning and navigating peer review with a mock study section, as well as small group breakouts on proposal development and career roadblocks. Attendees also had the option to tour NCCIH intramural lab facilities and interacted with program staff from nine other institutes and centers from across NIH.

“Transitioning to the first independent position can be daunting and challenging for young scientists,” said Dr. Lanay Mudd, NCCIH training officer and workshop organizer. “This workshop was designed to cover a wide range of topics that pre-and postdocs need to help them succeed in the transition. Developing this workshop supports NCCIH’s commitment to research training, career development and increasing the diversity of the biomedical research workforce.”

While mentors were asked to participate in all the sessions, there was also programming specifically for them. They enjoyed a training module facilitated by the National Research Mentoring Network and had a chance to meet with NCCIH program, review, grants management and senior staff to share mentoring strategies.

Workshop participants were provided with a toolkit of practical resources. NCCIH plans to offer this workshop every other year so that all fellows and trainees have an opportunity to attend.

“The feedback from the participants was extremely positive,” said Mudd. Comments included: “I loved networking and hearing the reality of the review process. Hearing about challenges and roadblocks was encouraging and humanizing.” “Excellent information on funding sources, barriers and supports [and] for career development trajectories” and “NIH is massive and can be intimidating; this workshop helped me to know it better!” **B**

NINR’s Miller Receives National Award



Dr. Jeri L. Miller, chief of NINR’s Office of End-of-Life and Palliative Care Research, has been selected by the American Academy of Hospice and Palliative Medicine’s (AAHPM) board of directors as the recipient of an AAHPM Presidential Citation Award to be presented during the annual Assembly of Hospice and Palliative Care this coming March. The award acknowledges individuals who have made significant contributions to the field of hospice and palliative medicine. The AAHPM citation recognizes the “outstanding efforts and the leadership role of the NINR Office of End-of-Life and Palliative Care Research to stimulate innovative research initiatives, creating opportunities for collaborative activities and facilitating interdisciplinary science.” AAHPM is the only national medical specialty society for hospice and palliative medicine. Since 1988, it has supported hospice and palliative medicine through professional education and training, development of a specialist workforce, support for clinical practice standards, research and public policy advocacy.

FEEDBACK

Have a question about some aspect of working at NIH? You can post anonymous queries at <https://nihrecord.nih.gov/> (click on the Feedback tab) and we’ll try to provide answers.

Feedback: Recently, all ORF personnel received an email asking to respond to a “Send Word Now” alert. Can you explain a little more on why this is being issued, who initiated this, what it will be used for and if this is going to be an NIH-wide thing? Thank you.

Response from the Office of Research Facilities: Thank you for your inquiry. The NIH Office of Research Facilities is conducting additional tests of the Send Word Now and Get Word Back applications. NIH as a whole is currently leveraging Send Word Now and Get Word Back to ensure that it can communicate with its staff during a wide range of scenarios. Given that ORF has a highly distributed workforce with 24/7 coverage and that many ORF employees are best reached by radio, we are adjusting our processes to take those factors into account.

By conducting these tests we hope to familiarize ORF staff with the applications, implement best practices to create the most efficient response mechanisms and ultimately prepare for a scenario where these applications can assist ORF in the continuation of the numerous vital roles we play at NIH. We will continue to work closely with the Office of Research Services, Division of Emergency Management to assure the applications are leveraged to their highest potential. We look forward to your continued participation in these tests.

Goldstone

CONTINUED FROM PAGE 1

“When you’re hungry, you’re liable to find high-energy foods more appealing,” said Goldstone, head of the psychoneuro-endocrinology research group at Imperial College London, based at the Hammersmith Hospital in London, U.K.

An empty stomach produces ghrelin, referred to as the “hunger hormone.” Ghrelin signals the brain to feel hunger. After a person eats, the intestines produce hormones such as GLP-1 and PYY that ease the sensation of hunger.

In several studies, Goldstone has observed that when volunteers were shown photos of hamburgers, pizza, cake and other high-energy dense foods on an empty stomach, activity increased in the areas in the brain



“Food intake suppresses the brain’s responsiveness to unpleasant images.”

—DR. TONY GOLDSTONE



that respond to reward. The opposite happened when patients were full. Reward centers were less active when the volunteers viewed photos of high-energy foods. The effects of fasting could be mimicked by giving injections of the hormone ghrelin.

He also studied patients who have had gastric bypass surgery, a procedure for obesity in which parts of the stomach and intestines are reconnected so that food bypasses most of the stomach and the first part of the small bowel. After the surgery, Goldstone said, patients respond less to photos of high-energy foods than do patients with obesity who have not had surgery, or after a different type of surgery called gastric banding. The appeal of high-energy foods declines after gastric bypass surgery, as does the associated activation of the brain reward system, while the appeal of low-energy foods, such as vegetables, stays the same.

In fact, the intestines of patients who have had gastric bypass surgery produce more GLP-1, a hormone that reduces blood sugar and causes a reduction in appetite, and PYY, a hormone that also reduces appetite. The changes in these hormones are in part

responsible for the beneficial effects of this surgery and appear also to explain these healthy changes in food reward.

In addition to altering how the brain responds to pictures of food, nutritional state might also influence other addictive behaviors, including how people respond to money and stress, how impulsive they are or the risks they take.

In one study, Goldstone’s team told healthy volunteers they could win money if they pressed a button at a correct time. When volunteers had not eaten overnight and were hungry, their brain’s reward centers showed more activity while they were anticipating winning money than when they were full. This study also found that when volunteers were shown unpleasant photos that produced discomfort, their brains were more responsive if they hadn’t eaten.

“Food intake suppresses the brain’s responsiveness to unpleasant images,” he explained. “We have also seen this happen after gastric bypass surgery, suggesting that changes in gut hormone may be responsible for this effect.”

In animal studies, the gut hormones



Goldstone explains how gut hormones influence various cravings.

PHOTOS: MENA BRUNETTE

GLP-1 and ghrelin have been shown to “modify reward behaviors to almost any drug tested.”

Currently, Goldstone is studying patients who are trying to lose weight and others who have recently quit drinking alcohol or smoking cigarettes, as part of the Gut Hormones in Addiction study (www.ghadd.ac.uk). “We are investigating whether manipulation of these GLP-1 and ghrelin hormones can reduce craving and brain responses to food, alcohol or cigarettes, as well as unpleasant images.” He hopes to publish his findings soon.

“These gut hormones are targets towards treating obesity, but also may be effective in preventing cravings and reducing consumption and relapse in populations such as alcoholics and smokers,” he concluded. **R**

Diez Roux To Give 1st NIMHD Director’s Lecture

DEC. 7

Dr. Ana. V. Diez Roux will discuss “Challenges and Opportunities for Health Disparities Research” on Dec. 7 at 10 a.m. in Lipsett Amphitheater, Bldg. 10. Her presentation is part of a new quarterly lecture, the NIMHD Director’s Seminar Series. The goal of the series is to highlight novel research discoveries by prominent researchers who are advancing the science of minority health and health disparities.

Diez Roux is dean and distinguished university professor of epidemiology in the Dornsife School of Public Health at Drexel University. A physician and epidemiologist, she is known internationally for her research on the social determinants of health. For more than 20 years, her work has affected public health research, policy and practice.

Diez Roux’s presentation will address conceptual models of health disparities, implications for research and action; methodological challenges; emerging directions and promising areas for collaboration.

Diez Roux received an M.D. from the University of Buenos Aires, a master’s degree in public health and a doctorate in health policy and management from Johns Hopkins School of Hygiene and Public Health.

For reasonable accommodation, call (301) 402-1366 or the Federal Relay, 1-800-877-8339.





IMAGE: THINKSTOCK/MYKOLALVASHCHENKO

Air Pollution Exposure in Early Pregnancy Linked To Miscarriage, Study Suggests

Exposure to common air pollutants, such as ozone and fine particles, may increase the risk of early pregnancy loss, according to a study conducted by NIH. The study appears in the journal *Fertility and Sterility*.

Ozone is a highly reactive form of oxygen that is a primary constituent of urban smog. Researchers followed 501 couples attempting to conceive between 2005 and 2009 in Michigan and Texas. The investigators estimated the couples' exposures to ozone based on pollution levels in their residential communities.

The researchers do not know why exposure to air pollutants might cause pregnancy loss, but it could be related to increased inflammation of the placenta and oxidative stress, which can impair fetal development. The findings suggest that pregnant women may want to consider avoiding outdoor activity during air quality alerts, but more research is needed to confirm this association.

The study was led by Dr. Pauline Mendola, an investigator at NICHD. Her team previously found that ozone increased the risk of stillbirth. Mendola and her colleagues have also examined the effects of air pollution and extreme temperatures on other adverse outcomes of pregnancy.

Opioid Treatment Drugs Have Similar Outcomes

A study comparing the effectiveness of two pharmacologically distinct medications used to treat opioid use disorder—a buprenorphine/naloxone combination and an extended release naltrexone formulation—shows similar outcomes once medication treatment is initiated.

Among active opioid users, however, it was more difficult to initiate treatment with the naltrexone. Study participants were dependent on non-prescribed opioids, 82 percent of them on heroin and 16 percent on pain medications.

The research, published in *The Lancet*, was conducted at 8 sites within the National Institute on Drug Abuse Clinical Trials Network.

Five hundred and seventy opioid-dependent adults were randomized to the buprenorphine combination or the naltrexone formulation and followed for up to 24 weeks of outpatient treatment. Study sites differed in their detoxification approaches and in their typical inpatient length of stay. Buprenorphine/naloxone (brand name Suboxone) was given daily as a sublingual film (under the tongue) while naltrexone (brand name Vivitrol) was a monthly intramuscular injection. Adverse events, including overdoses, were tracked.

“Studies show that people with opioid dependence who follow detoxification with no medication are very likely to return to drug use, yet many treatment programs have been slow to accept medications that have proven to be safe and effective,” said NIDA director Dr. Nora Volkow. “These findings should encourage clinicians to use medication protocols, and these important results come at a time when communities are struggling to link a growing number of patients with the most effective individualized treatment.”

Scientists conducting the research expected that it would be more difficult to initiate treatment with naltrexone because it requires a full detoxification and patients often drop out of that process early. However, both the extent of the detoxification “hurdle,” and how the medications would compare once they were initiated, was not known.

Methadone, a third FDA-approved medication for treating opioid use disorders, was not studied in this project. Methadone is a synthetic opioid agonist usually given in liquid form that has been used successfully for more than 40 years. It must be dispensed through specialized opioid treatment programs, whereas buprenorphine/naloxone and naltrexone can be offered from a doctor's office with a prescription.

Methadone has also been prescribed as a treatment for chronic pain.

Overdose deaths linked to opioid pain medicines nearly quadrupled from 2000 to 2014, to nearly 19,000. There is now also a rise in heroin use and heroin addiction as some people report shifting from prescription opioids to heroin because it is cheaper and easier to obtain. In 2015, nearly 600,000 people in the United States had a heroin use disorder and close to 13,000 Americans died of a heroin overdose.



IMAGE: THINKSTOCK/ADRIAN825

Obesity During Pregnancy May Lead Directly to Fetal Overgrowth

Obesity during pregnancy—independent of its health consequences such as diabetes—may account for the higher risk of giving birth to an atypically large infant, according to researchers at NIH. Their study appears in *JAMA Pediatrics*.

“Our results underscore the importance of attaining a healthy body weight before pregnancy,” said the study's lead author Dr. Cuijin Zhang, a researcher in NICHD's Division of Intramural Population Health Research. “They also suggest that clinicians should carefully monitor the pregnancies of all obese women, regardless of whether or not they have obesity-related health conditions.”

Macrosomia—large body size at birth—is common among children born to obese women, particularly those who have gestational diabetes (high blood sugar during pregnancy). Macrosomia increases the risk that an infant will experience bone fracture during delivery. It also increases the likelihood that the infant will need to be delivered by cesarean section.

Having a large infant also increases a mother's risk for postpartum

hemorrhage, or excessive bleeding at birth.

The authors pointed out that earlier studies have indicated that the higher risk of overgrowth seen in newborns of obese women may predispose these infants to obesity and cardiovascular disease later in life. They called for additional studies to follow the children born to obese women to determine what health issues they may face.

Study Finds Donor Corneas Can Be Safely Preserved for Longer Period

Results from a large, national clinical trial show that corneal donor tissue can be safely stored for 11 days without negatively impacting the success of transplantation surgery to restore vision in people with diseases of the cornea. The cornea is the eye's clear outer covering. Currently, donor corneas are generally not used for surgery in the United States if they have been preserved for longer than 7 days.

Two reports from the Cornea Preservation Time Study, which was funded by the National Eye Institute, appeared online Nov. 10 in *JAMA Ophthalmology*.

Expanding the window in which donor tissues can be considered suitable by even just a few days should help safeguard quality donor tissue and access to vision-saving transplantation procedures.

The study's lead investigator was Dr. Jonathan Lass of Case Western Reserve University School of Medicine and University Hospitals Eye Institute, Cleveland.

Patients were randomly assigned to 1 of 2 treatment groups. The first received corneas preserved up to 7 days and the second received corneas preserved for 8 to 14 days.

The Food and Drug Administration has approved the use of solutions to preserve donated corneas for 14 days. “The current practice of surgeons to use corneas preserved for no longer than 7 days is not evidence-based,” said Lass, “but rather a practice based on opinion, which hopefully will change with this new evidence.”

Wawrousek, Designer of First Transgenic Mouse at NEI, Retires

BY KATHRYN DEMOTT

Dr. Eric Wawrousek, director of the National Eye Institute Genetic Engineering Core, retired Aug. 31 after more than 31 years at NEI. Wawrousek oversaw the exponential growth of transgenic mouse model engineering at NEI.

“Eric was critical in establishing the GEC as one of the premier genetic engineering core facilities at the NIH,” said Dr. David Schneeweis, NEI deputy scientific director. “He also operated a highly efficient animal colony management system that was unique to the NEI. It has saved the NEI a lot of money in animal costs over the years and has benefitted NEI scientists immensely.”

Wawrousek graduated from Rensselaer Polytechnic Institute with a bachelor of science degree in chemistry. After earning his doctorate in biochemistry and molecular biology from the University of Maryland, he joined the NEI Laboratory of Molecular and Developmental Biology (LMDB) as a postdoctoral fellow in 1984. There, he worked with LMDB chief Dr. Joram Piatigorsky, studying transcriptional regulation and the expression of crystallins, which are proteins that contribute to the transparent and refractive qualities of the lens.

Wawrousek developed the first NEI-generated transgenic mouse models while a postdoctoral fellow for the purposes of studying crystallin gene expression. Later, while on permanent staff, he generated NEI’s first gene knockout mouse model by knocking out a gene for a type of crystallin called alphaB.

Designing the model in the early 1990s took more than a year and required detailed mapping of the genetic locus. “Things have changed quite a lot since then in terms of the ease and speed that models can be developed today,” Wawrousek said.

Nevertheless, the alphaB crystallin knockout model was instrumental in launching collaborations between him and dozens of scientists because it helped establish that crystallin protein plays a key role not only in the eye’s structures, but also in other tissues of the body including muscle and nervous system tissues.

In 1988, after his NIH postdoc, Wawrousek joined SmithKline Beecham, where he ran the transgenics and monoclonal antibody production facilities.

In 1991, NEI recruited Wawrousek back to NIH to lead the newly launched NEI Central Transgenic Facility, and as an LMDB section head. The NEI Central Transgenic Facility was later subsumed

into the GEC, expanding the facility’s scope and function.

Until his retirement, Wawrousek co-directed GEC with Dr. Lijin Dong, managing the facility’s budget and most of its administrative functions. He also supervised technicians who perform DNA isolation and genotyping, mouse line cryopreservation and mouse colony management. He orchestrated organization of the facility’s mouse lines, establishing a system to cryopreserve mouse germplasm to create space for new lines.



Dr. Eric Wawrousek

Over the years, the core facility generated hundreds of mouse lines by simple DNA microinjection, by knocking genes in and out with homologous recombinant technology and, more recently,

by deploying CRISPR/Cas9 to edit the genes.

As a research biologist at NEI, Wawrousek published more than 100 papers, many of them widely cited. He served as chair of the NEI safety & health committee and on the NEI crisis response team, as well as many other NEI committees over the years.

In retirement, he plans to volunteer at local scientific societies and hopes to devote his time and energy to political campaigns.

McClave Retires from NCI

Catherine B. McClave retired recently after 44 years of government service. For the past two decades, she has supported the senior leadership of NCI’s Division of Cancer Epidemiology and Genetics (DCEG). In her most recent role as senior advisor for division operations, she provided scientific and administrative leadership for scientific reporting, strategic planning and budget formulation for DCEG.

“Throughout her tenure at DCEG, Cathy has been instrumental in directing the division’s complex operations, from scientific reporting to budget,” said division director Dr. Stephen Chanock. “She has provided expert support to nearly every branch and investigator and her efforts will be sorely missed.”

McClave began her career at NCI in the Laboratory of Biochemistry then transferred to the Office of Research Services. She later returned to NCI as part of the Administrative Career Development Program, joining the budget office at the completion of the program. From there, she transferred to

the Office of the Director within the NCI Division of Cancer Etiology. She made her final move to the Office of the Director within DCEG shortly after NCI established the division in 1995, joining her mentor Dr. Susan Sieber, who became the first deputy director of DCEG.

“When Dr. Sieber eventually left the division, she remarked that one of the best things she had done for DCEG was to bring Cathy with her,” said Dr. Shelia Zahm, scientific advisor. “I remember her words to this day, because they indeed predicted Cathy’s remarkable contributions to the division. She has been an incredible source of wisdom, organization, writing, editing and management in support of the division’s scientific and administrative activities.”

McClave served as the division liaison to the NCI Institute Review Office for site visit coordination and other activities involving the NCI board of scientific counselors and the National Cancer Advisory Board. She was executive secretary for the DCEG promotion and tenure review panel and the technical evaluation of protocols committee and managed the formal process for the promotion of DCEG tenure-track investigators to NIH tenure. She was responsible for preparation of the division’s scientific narratives for the congressional budget justification and responses to inquiries from NIH, PHS, HHS, Congress, other federal agencies and the public.

McClave oversaw division communications activities and content preparation for its newsletter, as well as responses to Freedom of Information Act inquiries, review of intramural/extramural letters of collaboration, official duty and outside activity inquiries and the appointment process for the special studies institutional review board.

She is former chief of the DCEG Office of Communications and Special Initiatives, a position she held from 2008 to 2015. She received two NIH Merit Group Awards, one in 1998 and one in 2011. She also received an NCI Director’s Award in 2017.

“Cathy came to DCEG at a critical time, just as we attained division status as a major component of the intramural research program at NCI and NIH,” said founding DCEG director Dr. Joseph

Fraumeni, Jr. “We were immediately confronted with a series of challenges in managing an expanding scientific portfolio. We came to depend on Cathy for her remarkable ability to see the big picture and take care of every little detail. There was never a deadline that she didn’t meet or a project that wasn’t done to perfection. She has been an indispensable leader in the division, as well as a terrific colleague and friend to all of us.”—Cora Hersch



Catherine B. McClave

NIGMS's Haynes Retires After 35-Year Federal Career

BY EMILY CARLSON

"I've always been a fly person," said Dr. Susan Haynes on the eve of her retirement from NIGMS.

Those pesky insects that feast on brown bananas and other overripe fruit in your kitchen were a key part of Haynes' career. As a scientist working in the field of developmental biology, she turned to fruit flies (*Drosophila melanogaster*) to answer fundamental questions about the formation of egg cells and sperm. She taught graduate students about fruit fly genetics and even started a local *Drosophila* interest group.

"Advances in my field have exploded dramatically because new tools and methods have made it possible to ask and answer more complex questions," she explained.

For the last dozen or so years, Haynes played an integral role in its progress—not as a scientist but as a research administrator. In her positions of program director, branch chief and twice-serving



Dr. Susan Haynes rides into retirement after a 35-year federal career. She will spend part of the time at her Idaho cabin near Payette Lake (shown here).

PHOTO: CARL BAKER

and appreciate the importance of offering an objective viewpoint.

And it rubbed off on Haynes' colleagues. "Susan led by example," said Dr. Kristine Willis, whom Haynes hired and trained. "She conveyed the importance and responsibility of being a program director and set top-level standards for performing the job."

Staff outside of NIGMS also benefitted from Haynes' wisdom and approaches. For 4 years, Haynes presented at and moderated group discussions in an NIH training program for new program directors.

As science advanced, Haynes' portfolio of grants shifted. For several years, she oversaw projects that were pushing the boundaries of stem cell biology. As a result, she got involved in the NIH stem cell task force, which explored the promise and challenges of this field. Haynes also organized workshops that brought together NIGMS-funded stem cell biologists to share their progress and discuss the resources and knowledge needed to drive the field forward.

Haynes' other responsibilities included developing and directing a program that provided supplemental funding for collaborative research projects and co-chairing the NIGMS strategic plan steering committee.

"Susan is a true NIH'er whose historical perspective and deep scientific knowledge have aided NIGMS in so many ways," said Dr. Judith Greenberg, NIGMS deputy director and former GDB division director. "She will be missed."

In retirement, Haynes plans to finally focus on herself. "It will give me an opportunity to rediscover my hobbies," she said. At the top of her list—gardening and watercolor painting.

She's excited to begin this phase with her husband, Dr. Carl Baker, who recently retired from NIAMS. They plan to spend part of each year at their cabin in Idaho. Maybe she'll come to love fishing flies, too. **R**

• • •
"She always put the investigators first, us second and herself a distant third."

-DR. DORIT ZUK

• • •
 acting director in NIGMS' Division of Genetics and Developmental Biology (GDB), she coached young scientists on getting their first research grants, mentored other program staff on interacting with grantees and laid the groundwork for new initiatives.

"She always put the investigators first, us second and herself a distant third," said Dr. Dorit Zuk, GDB division director.

When Haynes joined NIGMS in 2005, she was already familiar with its mission and programs. After receiving her doctorate in molecular cell biology from Rockefeller University in 1982, she completed a series of postdoctoral fellowships, including one funded by NIGMS's F32 training program and hosted at NICHD. She stayed on at NICHD as a senior staff fellow and investigator until 1999, when she moved across the street to the Uniformed Services University of the Health Sciences. An NIGMS research grant helped her establish and carry out her fruit fly studies.

This in-the-trenches experience of applying for and receiving her first R01 grant helped Haynes understand the grant applicant's perspective

Granulocyte Donations Needed

A pediatric patient with a rare blood disease and a fungal infection needs your help. Severe aplastic anemia occurs when a patient's bone marrow doesn't make enough new blood cells. When not enough white blood cells called granulocytes are formed, the body is at risk of life-threatening fungal infections. However, transfusions of granulocytes from blood donors can help fight infection.

Within 24 hours of your donation, granulocytes will be delivered to a 6-year-old NIH patient to help fight fungal infection in the lungs.

Donors must come in the day before donation for medication to increase the amount of white blood cells in the circulatory system. Donors must also be group A or AB. Not sure what blood type you are? Donor center staff will find out. If you aren't a match for granulocyte donation for this patient, you can sign up to donate for a future patient and donate whole blood or platelets in the meantime.

Shuttles are available to the granulocyte/platelet donation center in Rockville at Fishers Ln. Call (301) 496-4321 for more information on how to help save a life.

Healthy Volunteers Needed

NIAID researchers seek healthy volunteers, 18-50 years old, for an investigational vaccine study targeting respiratory syncytial virus (RSV). Compensation is provided. For more information, call 1-866-833-5433 (TTY 1-866-411-1010). Email vaccines@nih.gov or visit <http://bit.ly/2nOkOvY>.

How Does Puberty Affect Brain Development?

Your 8-year-old healthy child is invited to participate in an NIH outpatient research study that examines how puberty affects brain development. Participation includes 1-3 day outpatient visits to the Clinical Center every 8-10 months until age 17 for a physical examination, body measurements, questionnaires, MRI scans, blood draws, urine collection and x-rays. Participants must not have any chronic medical or psychiatric illnesses, nor be on any long-term medication. Parents must agree to their child's participation. Evaluations and research procedures are free of cost. Compensation is provided. To find out if you qualify, call (301) 496-9576 (TTY 1-866-411-1010). Refer to study 11-M-0251.

'MAKE HUMAN CONNECTIONS'

Cultivate 'Relationship Currency,' Says Morgan Stanley's Harris

BY JUANITA MCLEOD

Carla Harris learned the power of taking risks when she first started at Morgan Stanley. When she began her career on Wall Street, everyone told her not to go into mergers and acquisitions because it was tough for women. She chose to pursue the specialty market anyway. Now a vice chair at Morgan Stanley, Harris shares the lesson she learned: Risk pays off. Even when you fail, you learn and grow, so it's worth it.

She visited NIH recently, at the invitation of the Office of Equity, Diversity, and Inclusion, to share some advice on achieving personal success that also produces organizational success.

Vice chair of global wealth management and senior client advisor at Morgan Stanley, Harris talked about the importance of diversity, not only as it applies to funds and financial portfolios, but also in establishing diversified workplaces.

Financial portfolios are stronger when diversified because of the strengths that each fund brings to the mix, as is the workplace when it pulls from a diverse mix of backgrounds, knowledge and expertise, she explained.

Harris focused on three of her "pearls" of wisdom that she said are centerpieces to personal and organizational success.

"Pedigrees do not maximize success," said Harris, who holds a degree in economics as well as an M.B.A. She offered three components of a strategic win—performance currency, relationship currency and risk taking.

Performance currency, she said, is generated by delivering what is asked of you plus more. Performance currency can get you noticed, paid, promoted and can attract sponsors. But still that only gets you so far.

It is relationship currency that has the higher return on investment, Harris suggested.

Drawing a correlation between investing in the stock market and investing in yourself, she said, "Performance currency premiums can drop...It is relationship currency that doesn't experience diminishing returns...Relationship currency is investing in the people in your environment."

Harris noted that contributions will get you noticed, but if you fail to make human connections and interactions through "frequency of touch," then performance currency will lose its value. What builds relationships is frequency of touch—brief chats with colleagues throughout the workday or just noticing and greeting coworkers.

"I don't care how hard you work, I don't care how smart you are," she said, "you're going to need somebody else's relationship currency to do well. You can't maximize your success in any



Carla Harris speaks at NIH.

PHOTO: MARLEEN VAN DEN NESTE

professional seat without relationships...[This includes] the sponsor relationship, which is the person that behind closed doors will use their capital to speak on your behalf."

Part of relationship currency is cultivating advisors, mentors and sponsors.

NCI Hosts Visit by Journalists

BY ROBERT PINES

"Science is a sputtering course, filled with dead-ends, U-turns and blind leads; it's not a smooth, relentless trajectory."—James Evans

So read a slide presented by independent journalist Sonya Collins as she addressed the complexities of genomics to a classroom of reporters from across the U.S. and Canada. In an effort to enhance understanding of difficult scientific topics and make the "sputtering course" a bit less difficult to navigate, Collins was on campus as one of many speakers for the second iteration of the National Cancer Reporting Fellowships.

The workshop, hosted by the Association of Health Care Journalists (AHCJ) together with the National Cancer Institute, was designed to give 12 journalists an opportunity to interact with top experts in cancer research and learn how better to report on newsworthy scientific developments. The journalists, representing a variety of outlets from local radio and television stations to *NBC News* and *Consumer Reports*, were on campus Nov. 6-9.

"With all that's happening in cancer research and treatment right now, reporters are being asked to explain the latest to the public, and to explain it best means really understanding it," said Len Bruzzese, AHCJ's executive director. "The fellowship is a chance to immerse reporters in the topics [through] exposure to key experts willing to share their knowledge and experience."

Program sessions dealt with subjects as varied as the Cancer Moonshot, clinical trials and drug costs. During a session on cancer screening and guidelines, Dr. Barry Kramer of NCI emphasized how important it is that journalists convey strength of evidence and understand the limitations of a study design. Another session on immunotherapy featured a joint presentation by Dr. Nicholas Restifo of NCI and Matthew Ong, a reporter with

A mentor offers you tailored advice on a variety of things and knows you well. "A mentor is who you share your feelings with—fears, goals, needs," said Harris. "But more importantly, you want to get a mentor who has gone the path that you've gone."

Harris's final pearl? "Be comfortable with change," she concluded. "Change shows growth and adaptability. Fear has no place in your success equation."

Always "expect to win" in every endeavor, she continued. "Be intentional about everything" and remember "no one has a monopoly on intelligence." She urged the audience to use the most underutilized tool in your toolbox—networking. "Everyone has personal influential currency," she said.

Harris's talk is archived at <https://videocast.nih.gov/Summary.asp?Live=26023&bhcp=1>. Copies of her book *Strategize to Win* were given to audience members at the event. To request a copy while supplies last, contact joy.gaines@nih.gov. 



2017 National Cancer Reporting fellows

PHOTO: AHCJ

The Cancer Letter and an alumnus of last year's fellowship class who shared insights into reporting on such a complex topic.

Fellows were also given a primer on the NCI Surveillance, Epidemiology and End Results program, which provides information on cancer statistics. This included demonstrations on the functionality of NCI State Cancer Profiles and the NCI Geographic Information Systems Portal, both of which are publicly available to supplement the fellows' reporting.

Beyond the classroom, the program featured site visits as well. The fellows were given a tour of the Clinical Center, including inpatient clinics and laboratories, to learn about intramural research at NIH. Following a tour of the NCI Neuro-Oncology Branch, the fellows participated in a roundtable discussion about the NCI Rare Tumors Initiative with Drs. Mark Gilbert, Karlyne Reilly and Brigitte Widemann of NCI.

Ending on an aspirational note, the National Cancer Reporting Fellowships closed with a session titled "Where Do We Go From Here?" Wrapping up 4 days on campus, the fellows expressed an appreciation for seeing the actual operation of bench-to-bedside up close. In addition, they discussed the incredible amount of energy felt at NIH—an energy they hope to convey in future stories.